

Attorney Docket No.: 4483.210-US

PATENT

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Application of: Christensen et al.

Confirmation No: 4113

Serial No.: 10/099,704

Group Art Unit: 1653

Filed: March 15, 2002

Examiner: K. Carlson

For: Methods for Producing Polypeptides In Aspergillus Mutant Cells

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**CERTIFICATE OF FACSIMILE TRANSMISSION**

Commissioner for Patents  
Washington, DC 20231

Sir:


I hereby certify that the attached correspondence comprising:

1. Response to Restriction Requirement

was sent to the United States Patent Office by telefax to the attention of Examiner K. Carlson, fax number (703) 872-9306.

Respectfully submitted,

Date: June 7, 2004

  
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**AMENDMENT AND RESPONSE TO RESTRICTION REQUIREMENT**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

In response to the Office Action mailed May 6, 2004, please amend the above-identified application as follows:

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**AMENDMENTS TO THE SPECIFICATION:**

Please amend the paragraph on page 8, lines 6-7 as follows:

Preferably, a fragment of SEQ ID NO: 2 ~~of~~ has at least 320 amino acid residues, and most preferably at least 350 amino acid residues.

**AMENDMENTS TO THE CLAIMS:**

Claim 34 is canceled without prejudice or disclaimer. Claims 43-54 are added. The following is the status of the claims of the above-captioned application, as amended.

Claims 1-42 (Canceled).

Claim 43 (New). An isolated dimethylallyl-cycloacetoacetyl-L-tryptophan synthase, which is encoded by a nucleotide sequence which hybridizes with SEQ ID NO: 1 under medium stringency conditions, wherein the medium stringency conditions are defined by prehybridization and hybridization at 42°C in 5xSPPE, 0.3% SDS, 200 micrograms/ml sheared and denatured salmon sperm DNA, and 35% formamide, followed by washing three times for 30 minutes with 2xSSC and 0.2% SDS at 65°C.

Claim 44 (New). An isolated dimethylallyl-cycloacetoacetyl-L-tryptophan synthase of claim 43, which is encoded by a nucleotide sequence which hybridizes with SEQ ID NO: 1 under high stringency conditions, wherein the medium stringency conditions are defined by prehybridization and hybridization at 42°C in 5xSPPE, 0.3% SDS, 200 micrograms/ml sheared and denatured salmon sperm DNA, and 50% formamide, followed by washing three times for 30 minutes with 2xSSC and 0.2% SDS at 70°C.

Claim 45 (New). An isolated dimethylallyl-cycloacetoacetyl-L-tryptophan synthase of claim 44, which is encoded by a nucleotide sequence which hybridizes with SEQ ID NO: 1 under high stringency conditions, wherein the medium stringency conditions are defined by prehybridization and hybridization at 42°C in 5xSPPE, 0.3% SDS, 200 micrograms/ml sheared and denatured salmon sperm DNA, and 50% formamide, followed by washing three times for 30 minutes with 2xSSC and 0.2% SDS at 75°C.

Claim 46 (New). The dimethylallyl-cycloacetoacetyl-L-tryptophan synthase of claim 43, which is obtained from an *Aspergillus* strain.

Claim 47 (New). The dimethylallyl-cycloacetoacetyl-L-tryptophan synthase of claim 46, which is obtained from an *Aspergillus oryzae* strain.

Claim 48 (New). The dimethylallyl-cycloacetoacetyl-L-tryptophan synthase of claim 44, which is obtained from an *Aspergillus* strain.

Claim 49 (New). The dimethylallyl-cycloacetoacetyl-L-tryptophan synthase of claim 48, which is obtained from an *Aspergillus oryzae* strain.

Claim 50 (New). The dimethylallyl-cycloacetoacetyl-L-tryptophan synthase of claim 45, which is obtained from an *Aspergillus* strain.

Claim 51 (New). The dimethylallyl-cycloacetoacetyl-L-tryptophan synthase of claim 50, which is obtained from an *Aspergillus oryzae* strain.

Claim 52 (New). An isolated dimethylallyl-cycloacetoacetyl-L-tryptophan synthase which comprises an amino acid sequence of SEQ ID NO: 2 or a fragment thereof which has dimethylallyl-cycloacetoacetyl-L-tryptophan synthase activity.

Claim 53 (New). The dimethylallyl-cycloacetoacetyl-L-tryptophan synthase of claim 52, which comprises an amino acid sequence of SEQ ID NO: 2.

Claim 54 (New). The dimethylallyl-cycloacetoacetyl-L-tryptophan synthase of claim 52, which consists of an amino acid sequence of SEQ ID NO: 2.

**REMARKS**

Claim 34 has been canceled without prejudice or disclaimer. Claims 43-54 have been added and therefore are pending in the present application. Claims 43-54 are supported by claim 34. In addition, the hybridization conditions recited in claims 43-45 are supported by page 8, line 32 – page 9, line 18 of the specification.

This paper is filed in response to the Office Action mailed May 6, 2004 that made a restriction requirement between four designated groups:

Group I – claims 1-30 and 35-42 drawn to toxin deficient *Aspergillus* mutant cells and methods of use;

Group II – claim 31 drawn to polynucleotide encoding a synthase;

Group III – claims 32 and 33 drawn to the use of the polynucleotides encoding a synthase;

Group IV – claim 34 drawn to synthase.

Applicants note that claims 1-33 and 35-42 were cancelled by preliminary amendment filed March 15, 2002.

In order to be fully responsive, Applicants hereby elect with traverse the invention of Group IV (claim 34). Applicants hereby reserve the right to file continuing applications directed to the nonelected subject matter.

The Examiner is hereby invited to contact the undersigned by telephone if there are any questions concerning this response or application.

Respectfully submitted,

Date: June 7, 2004



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